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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/043,998	01/11/2002	Vitaliy S. Fain	3229.1000-000	8102

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AKC PATENTS  
215 GROVE ST.  
NEWTON, MA 02466

EXAMINER

SHORTLEDGE, THOMAS E

ART UNIT PAPER NUMBER

2626

DATE MAILED: 07/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/043,998

Applicant(s)

FAIN ET AL.

Examiner

Thomas E. Shortledge

Art Unit

2626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-5,9-13 and 17-19 is/are pending in the application.
- 4a) Of the above claim(s) 6-8 and 14-16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5,9-13 and 17-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. This communication is in response to Response of Office Action, filed 06/07/2006.
2. Claims 1-5, 9-13 and 17-19 are pending. Claims 6-8 and 14-16 have been withdrawn. Claims 1, 9, 17-19 are independent.

### ***Election/Restrictions***

3. Applicant's election without traverse of claims 1-5, 9-13 and 17-19 in the reply filed on 06/07/2006 is acknowledged.

### ***Claim Objections***

4. Claim 1 is objected to because of the following informalities: line 17 recites "20," it should be deleted. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-4, 9-12 and 17-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Block (6,073,102).

As to claims 1, 9, 17, 18 and 19, Block teaches:

a computer usable medium for providing computer understanding by generating computer instructions from a natural language dialog (Fig. 1)

a set of computer program instructions embodied on the computer usable medium (an application stored on a memory col. 7, line 50);

receiving a symbolic representation of a natural language utterance (receiving a speech input from a user, processed by the speech recognition unit, col. 6, lines 31-35);

determining, by accessing a context sensitive system dictionary for as subject area, a subject area identifier based upon parsing the symbolic representation, the parsing producing parsed information (determining a key concept from the input, using a key concept dictionary, and parsing the input to produce parsed information, col. 8, lines 15-25);

determining, by accessing a context sensitive system subdictionary for a program module of the subject area, a module identifier based upon the determined subject area identifier and the parsed information (determining from the key concept, the parsed

information, and a subdatabase related to a travel action, the type of action to take, be it "Rail information," "Air information," "Sea information," "Hotel information," or "Restaurant information," col. 8, lines 30-38 and col. 10, lines 30-54);

determining by accessing a context sensitive system subdictionary for an argument of the program module, an argument identifier based upon the determined module identifier and the parsed information (finding an argument within the input, that matches an argument identifier with the action taken using subdatabase related to a travel action, the action taken and the parsed information, col. 10, lines 41-55);

determining, by accessing a context sensitive system subdictionary for a value of the argument, a value identifier based upon the determined argument identifier and the parsed information (determining an argument parameter using a subdatabase related to the selected action, and the argument that needs to be filled, such as a location from and a location where to end travel, col. 15, lines 36-40); and

producing computer instructions based upon the subject area identifier, module, the module identifier, the argument identifier and the value identifier such that the natural language utterance is processed by the computer (computer instructions are created from information supplied by the input, including the key concept, action to be taken, an argument, and a argument value, col. 10, lines 41-55).

As to claims 2 and 10, Block teaches the context sensitive system dictionary for the subject area father comprises a context sensitive system subdictionary for a sub-subject area (the key concept database first recognizes the input includes the concept

travel, then the type of travel from a database, where the type of travel would be stored with a sub database, col. 8, lines 15-28 and col. 10, lines 41-55).

As to claims 3 and 11, Block teaches a value identifier further comprises querying the computer system for a missing value identifier (querying for additional information to fill in the argument parameters, col. 16, lines 35-50).

As to claims 4 and 12, Block teaches: wherein:

determining a subject area identifier further comprises querying a user of the computer system for a missing subject area identifier (querying the user for missing information pertaining to unrecognized key concepts, col. 16, lines 37-45);

determining a module identifier further comprises querying a user of the computer system for a missing module identifier (querying the user to determine what action to take, col. 16, lines 37-45);

determining a value identifier further comprises querying a user of the computer system for a missing value identifier (querying the user to find a missing argument identifier, col. 16, lines 45-51).

### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 5 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Block as applied to claims 1 and 9 above, and further in view of Polcyn (6,246,989).

As to claims 5 and 13, Block does not teach wherein, determining a subject area identifier further comprises using a previously determined value for a missing subject area identifier, determining a module identifier further comprises using a previously determined value for a missing module identifier, nor determining a value identifier further comprises using a previously determined value for a missing value identifier.

However, Polcyn teaches receiving a natural language command from a user, and understanding the command to carry out a particular action, by determining a subject, action to be taken and argument values. Furthermore, Polcyn teaches a system that is able to determine from previous values, command information that is not understood or is missing from the current natural language input (col. 7, lines 30-40).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the methods of Block with the teachings of Polcyn to allow a system to be updatable to contain new reference command information, as taught by Polcyn (col. 7, lines 38-40).

### ***Conclusion***


The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas E. Shortledge whose telephone number is (571)272-7612. The examiner can normally be reached on M-F 8:00 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on (571)272-7602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TS  
7/19/06



RICHEMOND DORVIL  
SUPERVISORY PATENT EXAMINER